Table 2.1. Cohort studies of chromium IV and lung and respiratory cancer

Author date/ Place	Characteristics of Cohort	Exposure Assessment	Comments	Exposure Category	a[1]	Relative Risk	95% CI	Type of estimate and reference population
Hansen, et al. (1996) Denmark	10 059 welders, stainless steel grinders, and other metal workers from 79 welding companies, employed 1964–84; followed 1968–86	Mailed questionnaire on lifetime occupation, and smoking/drinking habits. 83% response	Cohort partly included in Simonato study. Results for mild steel welders showed similar excess risk of lung cancer	All SS welders	23	1.19	0.75–1.79	SMR ref Denmark
Lauritsen and Hansen (1996) Denmark	Nested case-control within cohort of 8 372 respondents of the Hansen et al. 1996 cohort; 94 lung cancer deaths occurring 1946–86, 439 controls	Occupation and smoking history based on mailed questionnaires	Overlap with Hansen et al. 1996 and with Simonato et al. 1991. Results for mild steel welders showed similar excess risk of lung cancer.	All SS welders	20	1.5	0.8–2.6	OR adjusted for smoking
Alexander, et al. (1996) Washington state	2429 aerospace workers with > 6 month's exposure to Cr VI. employed 1940–94 and followed 1974–94	Industrial hygiene data and work history records; available for all years of the study		All workers	15	0.8	0.4 – 1.3	SIR ref Puget Sound
				49.3 – 184.7 chromate-years	5	1.1	0.3 – 2.5	SIR ref Puget Sound
Milntou-Smith, et al. (1997) Sweden	233 stainless steel welders from 8 different companies employed > 5 years 1950–65, followed 1955–92	Air measurement for Cr VI		High exposure to CrVI	6	1.64	0.60–3.58	SMR ref Sweden
Rafnsson. et al. (1997) Iceland	1172 licensed stone masons. born after 1 880 and alive in 1955; followed 1955–93		It was shown that Icelandic cement dust contains Cr VI and that masons have measurable Cr VI in urine	All workers	25	1.69	1.09–2.49	SIR ref Iceland